

REMARKS

Please reconsider the application in view of the above amendment and the following remarks. For the reasons discussed below, applicant submits that this amendment clearly places the claims into condition for allowance and no further consideration or search is required. Accordingly, applicant requests that the amendment be entered pursuant to 37 CFR 1.116.

Claims 1-5, 7-18, 20-30 and 32 are rejected. Claims 1, 9, 14, 22 and 27 have been amended. Claims 4-8, 17-21 and 29-32 have been cancelled. Claims 1-3, 9-16 and 22-28 remain pending.

Claims 1-5, 7-18, 20-30 and 32 are rejected under 35 USC § 102(e) as being anticipated by Furukawa (U.S. Patent No. 6,051,945). The Office Action asserts that Furukawa teaches “interrupting operation of the motor in case of obstruction based on variations in current, speed, and rotational position of the motor.” Applicant respectfully disagrees with this characterization of the Furukawa patent and traverses this rejection.

Independent claims 1 and 14, as amended, recite “a controller configured to interrupt operation of said motor in response to at least one feedback signal... representative of variation of at least one motor parameter with respect to variation of torque.” Independent method claim 27 similarly recites “disabling said motor when a variation in said motor parameter with respect to a variation in said torque reaches a predetermined level.” Claims 1, 14 and 27 have been amended further to clarify that the motor parameter comprises either motor speed or motor current draw. An example of the variation of motor speed and the variation of motor current draw with respect to variation of torque is illustrated in FIG. 2 of the present application. On

page 5, lines 16-25, the present specification further discloses that the motor can be disabled when variation in motor speed with respect to variation in torque ($d\omega/dT$) or variation in motor current draw with respect to variation in torque (dI/dT) exceeds some predetermined value.

In contrast, Furukawa discloses an anti-pinch safety mechanism that calculates a pinching force in accordance with changes in velocity sensed by a sensor and detects a pinched condition by comparing the pinching force to a predetermined force value. See Furukawa, Abstract. Furukawa does not disclose a controller that interrupts operation of a motor in response to a feedback signal representative of variation of at least one motor parameter (i.e., motor speed and/or motor current draw) with respect to variation of torque, as recited in independent claims 1 and 14. Furukawa also does not disclose disabling a motor when a variation in a motor parameter (i.e., motor speed and/or motor current draw) with respect to a variation in torque reaches a predetermined level, as recited in independent claim 27. Contrary to the assertions in the Office Action, Furukawa disables the motor when a pinching force reaches a predetermined force value, not based on a variation in speed or current. Although motor torque is used to calculate the pinching force (see Furukawa, Fig. 8, col. 6, ll. 1-67), this is not the same as a variation in a motor parameter with respect to a variation in torque.

For these reasons, Furukawa does not identically disclose the electro-mechanical actuator recited in independent claim 1, the vehicle window lift system recited in independent claim 14 or the method recited in independent claim 27. Accordingly, Applicant submits that these independent claims, and the claims dependent therefrom, are not anticipated by Furukawa and requests that the rejection under 35 USC §102(e) be withdrawn.

Applicant notes that amendments have also been made to dependent claims 9 and 22 to correct minor informalities and clarify the claims.

Applicant believes that this paper is responsive to each and every ground of rejection cited by the Examiner in the Action dated January 5, 2004, and respectfully requests favorable action in this application. The examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

Respectfully submitted,



Kevin J. Carroll, Attorney for Applicants
Registration No. 36,384
GROSSMAN, TUCKER, PERREAULT
& PFLEGER, PLLC

55 South Commercial Street
Manchester, NH 03101
Ph: 603-668-6560
Fx: 603-668-2970